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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,907	08/22/2003	Mitsuhiko Tanahashi	2003_1201	8536
513	7590	04/28/2004	EXAMINER	
WENDEROTH, LIND & PONACK, L.L.P.			HURLEY, SHAUN R	
2033 K STREET N. W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20006-1021			3765	

DATE MAILED: 04/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Applicati n No.</b>		<b>Applicant(s)</b>	
	10/645,907		TANAHASHI ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Shaun R Hurley		3765	

**-- The MAILING DATE of this communication appears n th cover sheet with the corresp ndence address --**

### Period for Reply

**A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.**

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 August 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 15-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☒ Certified copies of the priority documents have been received in Application No. 09/913,851.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>08/22/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant repeatedly uses terminology not clearly known in the art. Is elongation percentage in stretch equal to “elasticity”? Is the stretch modulus of elasticity equal to “Young’s Modulus”? How can tenacity have a unit of N/tex, when Newton is a force, not a mass?

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3 and 6, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by Kimura (3629053).

Kimura teaches a heat resistant crimped polyparaphenylene-terephthalamide yarn (Abstract) comprising fibers of 0.02 - 1 tex (Example 2), elongation percentage of stretch at least 6% (Table 1, Elongation at break percent), stretch modulus of elasticity is at least 40% (Table 1, Young’s Modulus), and the tenacity is between 0.15 and 3.5 N/tex (Tenacity is an extrinsic value based not on the yarn structure, but on the material used, and is explicitly taught by Kimura by way of teaching the specific fiber as explained above; See FIBER SCIENCE, page 127 for an

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explanation of tenacity in relation to fibers) which is formed into a bulky and stretchable fibrous product (Column 5, lines 66-69).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura in view of Watanabe et al (5776597).

Kimura essentially teaches the invention as discussed above, but fails to specifically teach the use of polymetaphenylene-isophthalamide fibers. Watanabe teaches that polymetaphenylene-isophthalamide and polyparaphenylene-terephthalamide are well known as being interchangeable in their use in heat resistance (Column 3, lines 40-59). It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize the polymetaphenylene-isophthalamide fibers as taught by Watanabe, since they are taught as well known in use, and they would perform every requirement of Kimura, including the provision of heat resistance. The ordinarily skilled artisan would have understood this and known when to use each fiber.

7. Claims 7, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura in view of Prickett (6103371).

Kimura essentially teaches the invention as discussed above, but fails to specifically teach the use of aramids in gloves, which Prickett teaches (Examples). It would have been

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obvious to one of ordinary skill in the art, at the time the invention was made, to utilize polyparaphenylene-terephthalamide as taught by Kimura in a glove, so as to provide both heat resistance and cut resistance. The ordinarily skilled artisan would understand the benefits provided by Kimura's fiber, and knowing its being knittable as detailed above and in consideration of Prickett, would be enabled to construct a simple glove.

8. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kimura in view of Watanabe, and further in view of Prickett.

The combination of Kimura in view of Watanabe essentially teaches the invention as discussed above, but fails to specifically teach the use of aramids in gloves, which Prickett teaches. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to utilize polyparaphenylene-terephthalamide or polymetaphenylene-isophthalamide as taught by the combination in a glove, so as to provide both heat resistance and cut resistance. The ordinarily skilled artisan would understand the benefits provided by both fibers, and knowing their being knittable as detailed above and in consideration of Prickett, would be enabled to construct a simple glove.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shaun R Hurley whose telephone number is (703) 605-1236. The examiner can normally be reached on Mon - Fri, 6:30am - 3:00pm, off every other Friday.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John J Calvert can be reached on (703) 305-1025. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SRH

21 April 2004

  
JOHN U. CALVERT  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700